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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
Group Art Unit 1644

In re Patent Application of

Richard B. Mazess, et al.

Application No. 09/402,636

Confirmation No.: 6232

Filed: April 26, 2000

Examiner: Huynh, Phuong N.

“TARGETED THERAPEUTIC DELIVERY OF  
VITAMIN D COMPOUNDS”

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PURSUANT TO 37 CFR §1.97(c)

Commissioner for Patents  
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Sir:

The Examiner's attention is directed to the references which are listed on the attached Forms PTO/SB/08A and PTO/SB/08B, copies of which are attached. This Statement is also being accompanied by a check for \$180 in payment of the fee required under 37 CFR §1.17(p). Please charge or credit Deposit Account No. 50-0842 with any shortage or overpayment of the required fee. This paper submission is being filed simultaneously with two electronic IDS submissions and all are considered to be part of the same, single IDS. Citation of these references is respectfully requested.

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03/17/2004 WASFAW1 00000150 09402636

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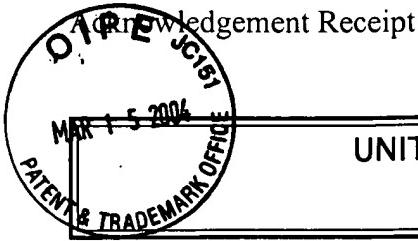
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Respectfully submitted,

Jeffrey D. Peterson  
Reg. No. 49,038

File No. 17620-9277

Michael Best & Friedrich LLP  
One South Pinckney Street  
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Electronic Version 1.1

Stylesheet Version v1.1.1

Title of Invention	TARGETED THERAPEUTIC DELIVERY OF VITAMIN D COMPOUNDS
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Submission Type: Information Disclosure Statement

Application Number: 09/402636 \*09/4

EFS ID: 56947

Server Response:

Confirmation Code	Message
ISVR1	Submission was successfully submitted - Even if Information or Warning Messages appear below, please do not resubmit this application
ICON1	6232
ISYS5	Filename= N/A BusinessRule= Validation System/Function Information. #Supporting Msg:Server unable to validate Confirmation/Application numbers at this time. They will be checked by PTO personnel later.

First Named Applicant: Richard Mazess

Attorney Docket Number: 0176209277

Timestamp: 2004-03-11 14:46:38 EDT

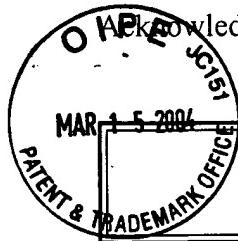
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File Listing:

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ACKNOWLEDGEMENT RECEIPT

Electronic Version 1.1

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Title of Invention	TARGETED THERAPEUTIC DELIVERY OF VITAMIN D COMPOUNDS
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Submission Type: Information Disclosure Statement

Application Number: 09/402636 \*09/4(

EFS ID: 56950

Server Response:

Confirmation Code	Message
ISVR1	Submission was successfully submitted - Even if Information or Warning Messages appear below, please do not resubmit this application
ICON1	6232
ISYS5	Filename= N/A BusinessRule= Validation System/Function Call Information. #Supporting Msg:Server unable to validate the Confirmation/Application numbers at this time. These numbers will be checked by PTO personnel later.

First Named Applicant: Richard Mazess

Attorney Docket Number: 0176209277

Timestamp: 2004-03-11 14:50:43 EDT

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File Listing:

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Title of Invention	TARGETED THERAPEUTIC DELIVERY OF VITAMIN D COMPOUNDS
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Application Number: 09/402636 \*09/402636\*

Confirmation Number: 6232

First Named Applicant: Richard Mazess

Attorney Docket Number: 0176209277

Examiner: Phuong H. Huynh

Search string: ( 6537982 ).pn.

### US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6537982	2003-03-25	Bishop et al			

### Remarks

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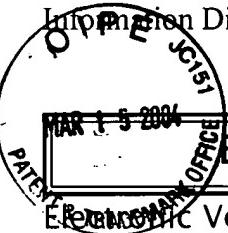
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**ELECTRONIC INFORMATION DISCLOSURE STATEMENT**

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Attorney Docket Number: 0176209277

Examiner: Phuong H. Huynh

Search string: ( 2383446 or 3697559 or 3741996 or 3907843 or 4160803 or 4195027 or 4202829 or 4234495 or 4260549 or 4292250 or 4362710 or 4508651 or 4554106 or 4555364 or 4588716 or 4661294 or 4689180 or 4698328 or 4717721 or 4833125 or 4866048 or 4902481 or 5063221 or 5104864 or 5141719 or 5157135 or 5205989 or 5219528 or 5232836 or 5264184 or 5264618 or 5334740 or 5338532 or 5372996 or 5403831 or 5417923 or 5488120 or 5527524 or 5554386 or 5576309 or 5597575 or 5602116 or 5614513 or 5637742 or 5661025 or 5691328 or 5739271 or 5795882 or 6309666 or 6521608 ).pn.

**US Patent Documents**

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init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	2383446	1941-06-04	Calcott et al			
	2	3697559	1972-10-10	DeLuca et al			
	3	3741996	1973-06-26	DeLuca et al			
	4	3907843	1975-09-23	DeLuca et al			
	5	4160803	1979-07-10	Potts			

6	4195027	1980-03-25	DeLuca et al
7	4202829	1980-05-13	DeLuca et al
8	4234495	1980-11-18	DeLuca et al
9	4260549	1981-04-07	DeLuca et al
10	4292250	1981-09-29	DeLuca et al
11	4362710	1982-12-07	Watanabe
12	4508651	1985-04-02	Baggiolini et al
13	4554106	1985-11-19	DeLuca et al
14	4555364	1985-11-19	DeLuca et al
15	4588716	1986-05-13	DeLuca et al
16	4661294	1987-04-28	Holick et al
17	4689180	1987-08-25	DeLuca et al
18	4698328	1987-10-06	Neer et al
19	4717721	1988-01-25	DeLuca et al
20	4833125	1989-05-23	Neer et al
21	4866048	1989-09-12	Calverley et al
22	4902481	1990-02-20	Clark et al
23	5063221	1991-11-05	Nishii et al
24	5104864	1992-04-14	DeLuca et al
25	5141719	1992-08-25	Fernwood et al
26	5157135	1992-10-20	Tsuji et al
27	5205989	1993-04-27	Aysta
28	5219528	1993-06-15	Clark
29	5232836	1993-08-03	Bouillon et al
30	5264184	1993-11-23	Aysta et al
31	5264618	1993-11-23	Felgner et al
32	5334740	1994-08-02	Takahashi et al
33	5338532	1994-08-16	Tomalia et al
34	5372996	1994-12-13	Labrie
35	5403831	1995-04-04	DeLuca et al
36	5417923	1995-05-23	Bojanic et al
37	5488120	1996-01-30	Knutson et al
38	5527524	1996-06-18	Tomalia et al

	39	5554386	1996-09-10	Groman et al
	40	5576309	1996-11-19	Tamura et al
	41	5597575	1997-01-28	Breitbarth
	42	5602116	1997-02-11	Knutson et al
	43	5614513	1997-03-25	Knutson et al
	44	5637742	1997-06-10	Valles et al
	45	5661025	1997-08-26	Szoka, Jr. et al
	46	5691328	1997-11-25	Peterson et al
	47	5739271	1998-04-14	Sridhar et al
	48	5795882	1998-08-18	Bishop et al
	49	6309666	2001-10-30	Hatano et al
	50	6521608	2003-02-18	Henner et al

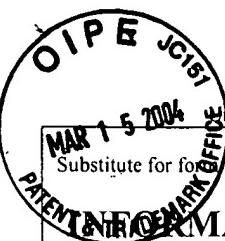
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## Signature

Examiner Name	Date



Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	1	of	5	Complete if Known
				Application Number
				09/402,636
				Filing Date
				April 26, 2000
				First Named Inventor
				Richard B. Mazess
				Group Art Unit
				1644
				Examiner Name
				Phuong N. Huynh
				Attorney Docket Number
				017620-9277

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
	Barton, D. et al., "Synthetic Uses of Steroidal Ring & Diene Protection: 22,23-Dihydroergosterol," <i>JCS Perkin I</i> , (1976) pp. 821-826.
	Beer, T. et al., "Weekly High-Dose Calcitriol and Docetaxel in Metastatic Androgen-Independent Prostate Cancer," <i>Journal of Clinical Oncology</i> , (Jan. 2003) 21:1:123-128.
	Blazsek, I. et al. "Combined Differentiation Therapy in Myelodysplastic Syndrome with Retinoid Acid, 1 $\alpha$ ,25 Dihydroxyvitamin D <sub>3</sub> , and Prednisone," 16:4:259-264 (Abstract).
	Brautbar, N. "Osteoporosis: Is 1,25-(OH)2D3 of Value in Treatment?" <i>Nephron</i> (1986) 44:161-166.
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	Cho, Y.L. et al., "Combined Effects of 1,25-Dihydroxyvitamin D <sub>3</sub> and Platinum Drugs on the Growth of MCF-7 Cells," <i>Cancer Research</i> , (June 1991) 51:2848-2853.
	Defacque, H. et al., "Different Combinations of Retinoids and Vitamin D <sub>3</sub> Analogs Efficiently Promote Growth Inhibition and Differentiation of Myelomonocytic Leukemia Cell Lines," <i>J. Pharmacology and Experimental Therapeutics</i> , (1994) 271:193-199.
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Substitute for form 1449B/PTO				<i>Complete if Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	09/402,636
Sheet	2	of	5	Filing Date	April 26, 2000
				First Named Inventor	Richard B. Mazess
				Group Art Unit	1644
				Examiner Name	Phuong N. Huynh
				Attorney Docket Number	017620-9277

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
	Foldes, J. et al., "Long Term Treatment with 1 $\alpha$ (OH)D <sub>3</sub> for Postmenopausal Osteoporosis: Efficacy and Safety," <i>Osteoporosis</i> , (1987) 2:971-973.
	Gallagher, J.C. et al., "Effects of Increasing Doses of 1 $\alpha$ -Hydroxyvitamin D <sub>2</sub> on Calcium Homeostasis in Postmenopausal Osteopenic Women," <i>J. Bone Min. Res.</i> , (1994) 9:5:607-614.
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	Lam, H.Y. et al., <i>Science</i> , (1974) 486:1038-1040.

Examiner Signature	Date Considered
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Substitute for form 1449B/PTO				<i>Complete if Known</i>	
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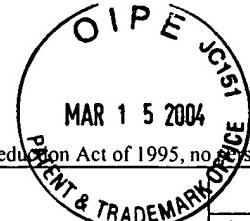
## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
	Majewski, <i>et al.</i> , "Inhibition of Tumor Cell-Induced Angiogenesis by Retinoids, 1,25-Dihydroxyvitamin D <sub>3</sub> and their Combination," <i>Cancer Letters</i> , (1993) 75:35-39.
	Martin and DeLuca, "Calcium Transport," <i>Am. J. Physiol.</i> , 216:1352-1359.
	Mathias, C.J. et al., "Tumor-Selective Radiopharmaceutical Targeting Via Receptor-Mediated Endocytosis of Gallium-67-Deferoxamine-Folate," <i>J. Nucl. Med.</i> (1996), 37(6):1003-1008.
	McDonald, F.G., "The Multiple Nature of Vitamin D," <i>J. Biol. Chem.</i> 114, (1936) 1xv.
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	Nemeto, H. et al., "A Stereoselective Synthesis of 1 $\alpha$ -Hydroxy-Vitamin D <sub>3</sub> ," <i>CHEMISTRY LETTERS</i> , (1985) 8:1131-1132.
	Paaren et al., "Direct C(1) Hydroxylation of Vitamin D <sub>3</sub> and Related Compounds," <i>J. Org. Chem.</i> , (1980) 45:3253.
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	Pouilles, J.M. et al., "Prevention of Early Postmenopausal Bone Loss with 1 $\alpha$ -Hydroxy Vitamin D <sub>3</sub> , A Three-Year Prospective Study," <i>Clin Rheumatol.</i> 11, 4 (1992) pp. 492-497.
	Ravid, A. et al., "1,25-Dihydroxyvitamin D <sub>3</sub> Enhances the Susceptibility of Breast Cancer Cells to Doxorubicin-induced Oxidative Damage," <i>Cancer Research</i> , (February 15, 1999) 59:862-867.
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Examiner Signature	Date Considered
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		Shiraki, M. et al., <i>Endocrinol. Japan</i> , (1985) 32:305-315.
		Siwinska, A. et al. "Potentiation of the Antiproliferative Effect <i>in Vitro</i> of Doxorubicin, Cisplatin and Genistein by New Analogues of Vitamin D," <i>Anticancer Research</i> , (2001) 21:1925-1929.
		Sjoden et al., "Effects of 1 OHD <sub>2</sub> on Bone Tissue," <i>Acta Endocrinol. (Copenh.)</i> (Aug. 1984) 16:4:564-568.
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Examiner Signature	Date Considered
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Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet	5	of	5	<i>Complete if Known</i>
				Application Number
				09/402,636
				Filing Date
				April 26, 2000
				First Named Inventor
				Richard B. Mazess
				Group Art Unit
				1644
				Examiner Name
				Phuong N. Huynh
				Attorney Docket Number
				017620-9277

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

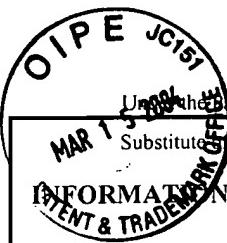
Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
		Tanaka, Y. et al., <i>Endocrinology</i> (1973) 92:417-422.
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Examiner Signature	Date Considered
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<p style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i></p>				<b>Complete if Known</b>	
				Application Number	09/402,636
				Filing Date	April 26, 2000
				First Name Inventor	Richard B. Mazess
				Group Art Unit	1644
				Examiner Name	Phuong N. Huynh
Sheet	1	of	1	Attorney Docket Number	017620-9277

**FOREIGN PATENT DOCUMENTS**

Examiner Initials	Country Code	Foreign Patent Document Number	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document	Translation	English Abstract
	Belgium	877 356	Wisconsin Alumni Research Foundation	10/15/79		
	Japan	5320127	Nisshin Flour Milling Co.	09/29/93		
	Japan	6025039	Kurary Co. Ltd.	02/01/94		
	Japan	62000033	General Hospital	10/15/86		
	EP	0197514	General Hospital	10/15/86		
	EP	0390097	Nisshin Flour Milling Co.	10/03/90		
	EP	0562497	Nisshin Flour Milling Co.	09/29/93		
	EP	0503630	Kuraray Co. Ltd.	09/16/92		
	EP	0664287	Duphar International	07/26/95		
	PCT	WO 84/04527	Wisconsin Alumni Research Foundation	11/22/84		
	PCT	WO 87/00834	Leo Pharmaceutical Products, Ltd.	02/12/87		
	PCT	WO 90/10620	Wisconsin Alumni Research Foundation	09/20/90		
	PCT	WO 92/05130	Lunar Corporation	04/02/92		
	PCT	WO 92/12165	Lunar Corporation	07/23/92		
	PCT	WO 92/14493	Capelli & Paaren	09/03/92		
	PCT	WO 92/21355	Procter & Gamble	12/10/92		
	PCT	WO 93/14763	Lunar Corporation	08/05/93		
	PCT	WO 94/16711	Lunar Corporation	08/04/94		
	PCT	WO 96/40153	Bone Care International	12/19/96		

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